

## Water Leak Repair in The University of Texas at Austin TRIGA Reactor

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**Program**: Reactor Upgrades

## **ABSTRACT:**

**Objectives:** The aim of this project is to repair a leak in one of the beam ports of The University of Texas at Austin TRIGA reactor. A small leak was found in the bellows of the Beam Port 1 to Beam Port 5 through port. While the leak is currently small and easily managed, the bellows must be replaced to restore the structural integrity of the reactor pool. While the leak is currently in only one of the beam port bellows, inspection of the other bellows within the through port shows signs of ageing. As a result, this project will replace both of the bellows.

**Methods:** An underwater dive team will perform the maintenance within the reactor pool. Prior to initiating the replacement all the fuel will be removed from the reactor and the beam ports will be sealed with plugs to prevent water leakage. The old bellows will be removed and stored to allow for the decay of radioactive material. New bellows and gaskets will be installed.